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## Patent Abstracts of Japan

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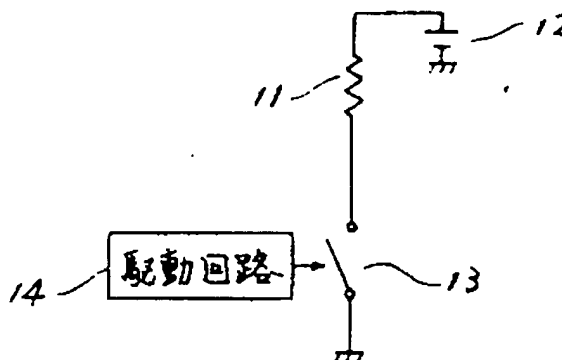
APPLICATION DATE : 24-04-89  
APPLICATION NUMBER : 01105214

APPLICANT : MATSUSHITA ELECTRIC IND CO LTD;

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TITLE : THERMAL HEAD



ABSTRACT : PURPOSE: To obtain a thermal head in which the need for a temperature sensor in addition to a heating resistor is eliminated by using a resistor having a temperature coefficient as the heating resistor for omitting a temperature sensor.

CONSTITUTION: A heating resistor 11 consists of a resistor having a temperature coefficient which is connected to a power source 12 at one end and to a switch 13 at the other end. The temperature increase of the heating resistor 11 is controlled by changing the resistance value of the resistor 11. The ON/OFF operation of the switch 13 is controlled by a drive circuit 14. The switch 13 is turned ON by the application of a high level signal. By selecting a temperature coefficient A, the resistor reaches the same temperature independently of the temperature of the resistor at the time of a voltage application, and irregularities in temperature can be eliminated. The selective change of the temperature coefficient of the resistor can be realized, e.g. by applying a doping technique to a semiconductor. In this manner, a complicated control circuit is omitted, and printing without irregularities in density can be realized.

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